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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,842	05/02/2007	Stefan Gram	660.339-US-WO	1150
22865	7590	10/07/2008		
Altera Law Group, LLC				
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Minneapolis, MN 55402				
EXAMINER				
JAMAL, ALEXANDER				
ART UNIT		PAPER NUMBER		
2614				
MAIL DATE		DELIVERY MODE		
10/07/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/588,842

Applicant(s)

GRAM ET AL.

Examiner

ALEXANDER JAMAL

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The examiner notes that claim 2 is cancelled.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 5,12** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per **claim 5**, the claim recites setting the characteristics of one channel for primarily voice, and the other channel is for non-voice. It is not clear how the device would be able to discern 'primarily voice' from 'non-voice'. Furthermore, it is unclear exactly what frequency ranges and spectrum would comprise 'primarily voice'. Applicant's specification gives no specific frequency ranges or means of detection.

As per **claim 12**, the claim uses the phrase 'such as'. It is not clear what the claim covers using this phrase.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

2. Claims 1- rejected under 35 U.S.C. 102(b) as being anticipated by Acree (5099514).

As per **claim 1**, Acree discloses an amplifier (equalizer) that is user-configurable to provide a transfer function (equalization curve) for a headset. The equalizers are for adapting the sounds sent to a headset (which are also the sounds in the frequency range that create the 'sound picture' to the headset listener (abstract).

As per **claim 3**, the characteristics are amplitude and frequency response (as well as the phase response inherent to the frequency response).

As per **claim 4**, the equalizer has a separate transfer function for the left and right ears (abstract).

As per **claim 6**, the characteristics may be set by the user, as such, the user may enact a 'priority override' by manually setting a desired characteristic (transfer function) to a desired channel at any given time (a prioritized signal is sent to a prioritized channel).

As per **claim 12**, the devices inherently comprises wires to couple the telephone, amplifier/eq, and headset for the purpose of coupling signals.

As per **claim 13**, the device comprises switches 38 that the user may use to set the characteristic (Fig. 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 7-11**, rejected under 35 U.S.C. 103(a) as being unpatentable over Acree (5099514) as applied to claim 1.

As per **claim 7**, Acree discloses using known interfaces to couple an amplifier/equalizer between a telephone and a handset, but does not specify every possible interface protocol that could be used to interface the disclosed devices, and also does not specify every type of transfer function that could be applied by the equalizer (such as TT4 spec).

It would have been obvious to one of ordinary skill in the art at the time of this application that any predefined standard (such as TT4) could be used for the disclosed equalizer as it is inherently advantageous to follow specifications (the whole point of a spec is to provide a design guide to follow when designing an applicable product). It further would be obvious that any known communications protocol/interface could be used to couple the disclosed telephone, amplifier/eq, and headset as a matter of design choice.

As per **claims 8,9**, it would have been obvious that any known transfer characteristic such as attenuating in one frequency range while amplifying in another could be set as a matter of design choice. Acree's equalizer can be adjusted for specific bands of frequency.

As per **claim 10**, the system (Col 2 lines 20-30) divides the input signal such that the average signal level input into the next stage is consistent. This is automatic gain control.

As per **claim 11**, The user may set an overall volume level (limit) (Col 2 lines 60-67).

5. **Claims 14-16**, rejected under 35 U.S.C. 103(a) as being unpatentable over Acree (5099514) as applied to claim 1, and further in view of Koyama et al (5581621).

As per **claims 14-16**, Acree discloses a programmable equalizer for a telephone, but does not specify a PC being used to program the equalizer via a USB or wireless connection.

Koyama discloses an audio device where the device characteristics (including equalization) (abstract) is programmable via an external computer 7 (which inherently requires an interface to connect to the system). It would have been obvious to one skilled in the art to make the equalizers programmable for the inherent advantages of programmability. It further would have been obvious to use a well known interface such

as USB or wireless for the purpose of letting the PC communicate with the equalizer/amplifier to perform the disclosed programming functions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Jamal whose telephone number is 571-272-7498. The examiner can normally be reached on M-F 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A Kuntz can be reached on 571-272-7499. The fax phone numbers for the organization where this application or proceeding is assigned are **571-273-8300** for regular communications and **571-273-8300** for After Final communications.

/Alexander Jamal/

Primary Examiner, Art Unit 2614

Examiner Alexander Jamal

October 8, 2008